METHOD AND APPARATUS FOR DYNAMICALLY ALLOCATING RESOURCES IN A COMMUNICATION SYSTEM

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Abstract of the Disclosure

A method and apparatus is provided that dynamically allocates processor resources to data transfer-related operations,

10   minimizing the processor resources used for data transfer-related operations and maximizing the processor resources available for other applications. The apparatus comprises a communication device (104), comprising a processing unit (204) and a complexity controller (206), which communication device (104) is capable of

15   executing multiple data transfer-related operations and is highly configurable. The complexity controller (206) monitors a condition of a communication channel (102) and determines the best configuration of communication device (104) in regard to processor resource utilization to meet a given Quality of Service

20   requirement for the condition of channel (102) and to maximize the processor resources available for other applications, such as data terminal equipment user applications (108) or signal processing by other communication devices using the same host processor.

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